

12FQ8

High-Mu Twin Double-Plate Triode

9-PIN MINIATURE TYPE

For Frequency-Divider and Complex-Wave-Generator
Circuits of Electronic Musical Instruments

GENERAL DATA

Electrical:

Heater, for Unipotential Cathode:

Voltage (AC or DC)	12.6 $\pm$ 10%	volts
Current at 12.6 volts	0.15	amp

Direct Interelectrode Capacitances (Approx.):^A

Grid to either plate (Each unit)	0.9	$\mu\mu\text{f}$
Grid to cathode and heater (Each Unit).	1.8	$\mu\mu\text{f}$
Plate A of unit No.1 to cathode and heater	0.34	$\mu\mu\text{f}$
Plate B of unit No.1 to cathode and heater	0.24	$\mu\mu\text{f}$
Plate A of unit No.2 to cathode and heater	0.3	$\mu\mu\text{f}$
Plate B of unit No.2 to cathode and heater	0.18	$\mu\mu\text{f}$
Plate A to plate B (Each unit)	0.7	$\mu\mu\text{f}$
Plate A of unit No.1 to plate A of unit No.2	0.4	$\mu\mu\text{f}$

Characteristics, Class A₁ Amplifier (Each Unit):

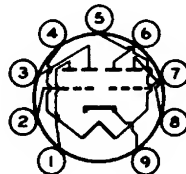
*Using either plate A or plate B, with
plate not in use connected to ground*

Plate Voltage	250	volts
Grid Voltage.	-1.5	volts
Amplification Factor.	95	
Plate Resistance (Approx.).	76000	ohms
Transconductance.	1250	μmhos
Plate Current	1.5	ma

Mechanical:

Operating Position.	Any
Maximum Overall Length.	2-3/16"
Maximum Seated Length	1-15/16"
Length, Base Seat to Bulb Top (Excluding tip).	1-9/16" $\pm$ 3/32"
Diameter.	0.750" to 0.875"
Dimensional Outline	See <i>General Section</i>
Bulb.	T6-1/2
Base.	Small-Button Noval 9-Pin (JEDEC No. E9-1)
Basing Designation for BOTTOM VIEW.	9KT

Pin 1 - Plate B of
Unit No.2
Pin 2 - Grid of
Unit No.2
Pin 3 - Plate A of
Unit No.2
Pin 4 - Heater
Pin 5 - Heater



Pin 6 - Plate B of
Unit No.1
Pin 7 - Grid of
Unit No.1
Pin 8 - Plate A of
Unit No.1
Pin 9 - Cathode



RADIO CORPORATION OF AMERICA
Electron Tube Division

Harrison, N. J.

DATA 1
10-60

12FQ8

FREQUENCY-DIVIDER & COMPLEX-WAVE-GENERATOR SERVICE

Values are for Each Unit

Maximum Ratings, Design-Maximum Values:

PLATE A VOLTAGE.	330	max.	volts
PLATE B VOLTAGE.	330	max.	volts
GRID VOLTAGE:			
Positive-bias value.	0	max.	volts
PLATE A DISSIPATION.	0.5	max.	watt
PLATE B DISSIPATION.	0.5	max.	watt
PEAK HEATER-CATHODE VOLTAGE:			
Heater negative with respect to cathode. . .	200	max.	volts
Heater positive with respect to cathode. . .	200 [•]	max.	volts

▲ Without external shield.

• The dc component must not exceed 100 volts.

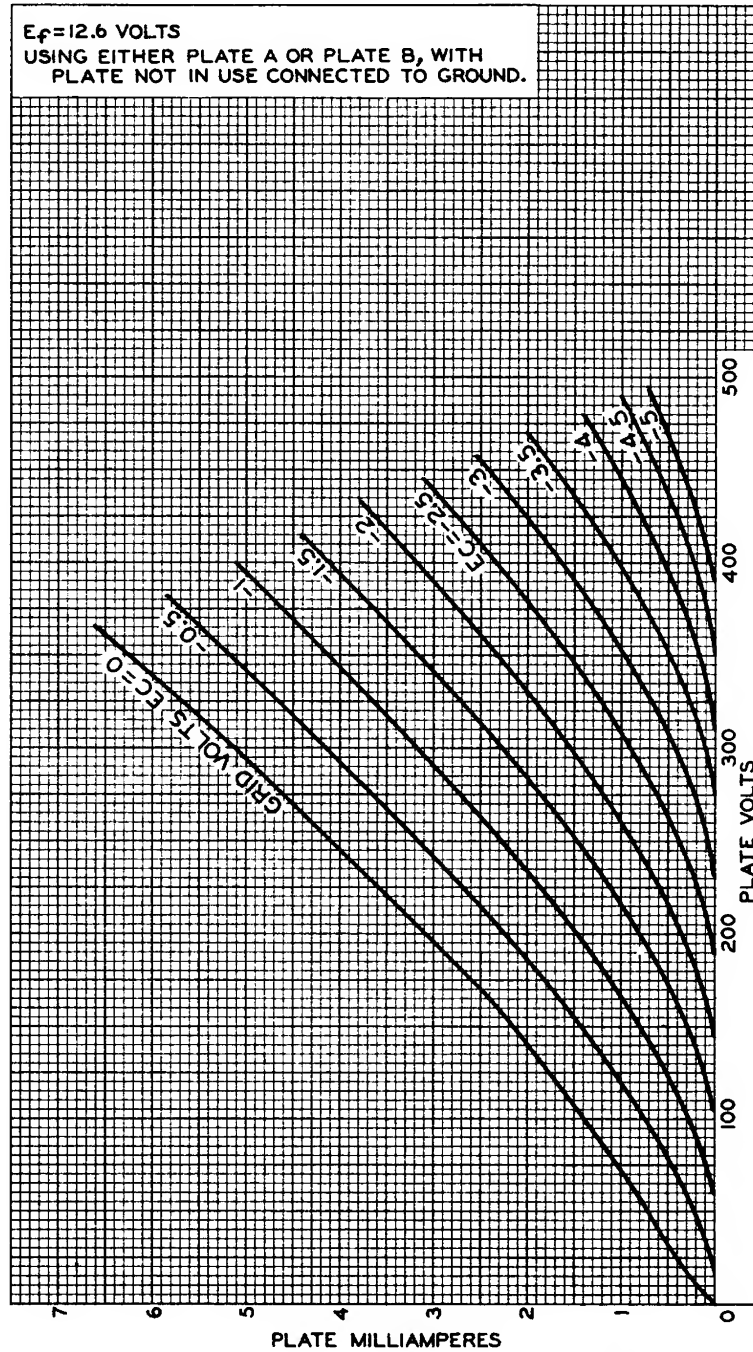


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AVERAGE PLATE CHARACTERISTICS Each Unit

$E_f = 12.6$ VOLTS

USING EITHER PLATE A OR PLATE B, WITH
PLATE NOT IN USE CONNECTED TO GROUND.



92CM-10755RI

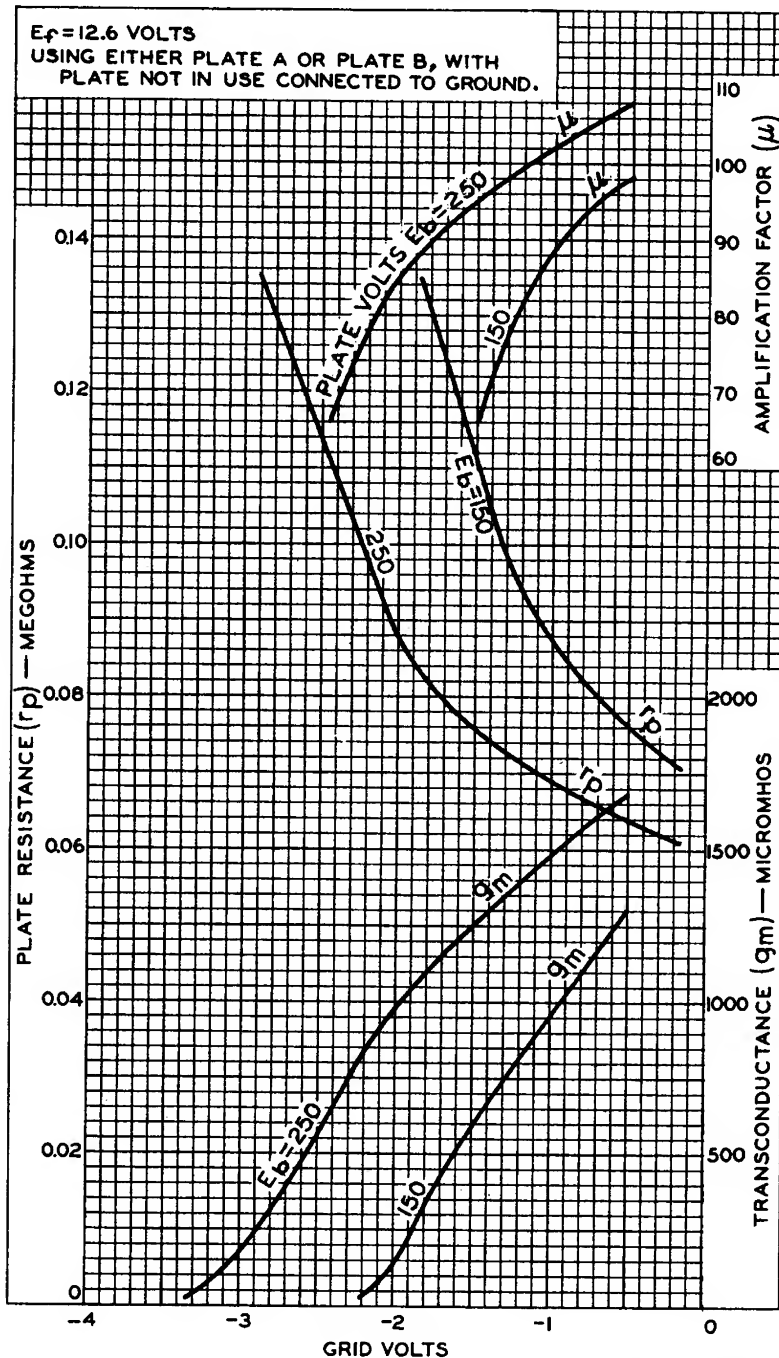


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DATA 2
10-60

12FQ8

AVERAGE CHARACTERISTICS Each Unit



92CM-10754R1

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